

CLIMATOLOGICAL DATA FOR MARCH, 1913.

DISTRICT NO. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor.

March was unfavorable for outdoor work on account of the cold weather and frequency of days with precipitation, a large proportion of which was in the form of snow. The snow protected fall-sown wheat and this crop is in better condition than usual. The weather was unfavorable for lambing and losses have been heavy in sections where the lambing season is early. Stock has come through the winter in poor condition, owing to snow covering the winter ranges and necessitating a large amount of extra feeding, which depleted the hay held in reserve to such an extent the ranchmen were obliged to put their cattle on short allowances during all or part of the month. The season is nearly two weeks later than last year and about a week later than the average for a period of 20 years. Scarcely any fruit was in bloom at the close of the month and horticulturists generally were in high spirits, on account of the lessened danger of damage to their crops by frost. The closing days were mild and wet, and as a result all streams rose rapidly while some of the smaller ones overflowed their banks and washed country roads so badly in places that traffic was delayed for several days. None of the large streams became sufficiently high to cause noteworthy damage.

TEMPERATURE.

March was colder than usual in every section of the district, except at a few places in south-central and western Oregon, where the monthly mean temperature was normal or slightly above. Departures below normal, ranging from 3° to 6° , were quite general in western Montana, northern and western Idaho, eastern Washington, and northeastern Oregon; elsewhere with few exceptions they ranged from 1° to 3° below normal. The weather was comparatively mild during the first decade, but was followed by a cold spell during which zero, or lower, temperatures prevailed in all portions of the district, except west of the Cascade Mountains. The coldest days were from the 20th to the 26th, at which time the lowest temperatures ever known so late in the season occurred in portions of Washington.

The mean temperature of the district, computed from observations received from 277 stations, was 45.4° , or 2.8° below normal. The highest temperature, 78° , was recorded on the 31st at Weiser, Idaho, in the eastern foothills of the Blue Mountains, at an elevation of 2,114 feet, and the lowest temperature, 39° below zero, occurred on the 25th at Pleasant Valley, Mont., on the northeastern slope of the Bitter Root Mountains, at an elevation of 3,500 feet; this latter station also reported the greatest daily range, which was 59° . Monthly mean temperatures ranged from 18.9° at Pierson, in south-central Idaho, at an altitude of 7,000 feet, to 47.8° at Alpine, in western Oregon, at 350 feet above sea level.

PRECIPITATION.

There was more than the usual amount of precipitation in portions of western Montana, northern Idaho, southeastern and northwestern Washington, and the greater part of northern Oregon, where it ranged from half an inch to nearly 4 inches above normal. In the Coast and Sound sections and along the Columbia River in Washington, and at scattered points in Montana, southern Idaho, and southern Oregon the precipitation was below normal, the greatest negative departures, 1 to nearly 4 inches, being in western Washington and southwestern Oregon, while in the other sections named the rainfall was but a little less than the average.

The greatest monthly precipitation, 15.10 inches, which was mostly in the form of snow, fell at Musick, Oreg., on the west slope of the Cascade Mountains at an elevation of 5,000 feet; this station also reported a total snowfall of 132 inches, the maximum amount recorded at any station in the district for the month. There was no precipitation at Trinidad and Wahluke, contiguous stations in central Washington. The greatest daily rainfall, 4.02 inches, occurred on the 17th at Quinault, Wash., near the coast on the west slope of the Olympic Mountains.

Owing to the cold weather there was more precipitation than usual in the form of snow, and so little melted that in some sections it was deeper at the end of the month than at the beginning, which is unusual at this season of the year.

THE RIVERS.

The rivers were below the normal for the month, although the stages in the Snake and Columbia were higher than those in March of the previous year and those in the Willamette were about the same. As compared with the preceding month the stages were somewhat higher.

The highest stages in the Columbia occurred on the 22d and 31st, and those in the Snake and Willamette on the 30th and 31st. The lowest stages were generally from the 1st to the 6th in the three streams.

Heavy rains on the 29th and 30th caused freshets in the Willamette River and tributaries which exceeded the flood stage at Eugene, Jefferson, and Cazadero, but, so far as known, without causing any serious damage.

MISCELLANEOUS PHENOMENA.

There was the usual amount of cloudy weather in Idaho and it was unusually cloudy in Washington and Oregon, in the last-named state there being more than the average number of cloudy days without precipitation. "Chinook" winds were experienced in some parts of

northeastern Washington on the 17th and 18th, causing the rapid disappearance of snow in those localities. The prevailing winds for the district were from a westerly direction, and the following maximum velocities were reported: Tatoosh Island, Wash., 66 east on the 6th and North Head, Wash., 66 southeast on the 17th.

The cooperative observer at Harbor, a coast station in extreme southwestern Oregon, makes the following statement:

A peculiar weather condition has existed all the month. An earthquake shock was felt by all on the 15th; just one wave which lasted the fraction of a second, and was felt at Crescent City, Cal. I felt several very little seismic waves on the night of the 20th.

The observer at Yale, Cowlitz County, Wash., also reported a distinct earthquake shock at 10 p. m. on the 19th.

THE SEASON'S SNOWFALL; AND SNOWFALL CONDITIONS IN THE MOUNTAINS AT THE HEADWATERS OF THE COLUMBIA RIVER AND ITS TRIBUTARIES AT THE END OF MARCH, 1913.

MONTANA.

The snowfall in January, 1913, was considerably above the normal in most of the mountain ranges within the Bitter Root, Flathead, Clarks Fork, and Missoula drainage basins of the upper Columbia. Mild temperatures the latter part of that month caused partial melting, and the snow became very solid. The February snowfall was generally light, and chinook conditions still further reduced the depth, but little snow melted and the run-off from the higher mountain districts was small. The March snowfall added somewhat to the accumulated depth in the mountains, and almost continuous night temperatures below freezing prevented any material loss by run-off. The small streams in nearly all sections carried less than the usual flow of water during March. The conditions at the close of the season in all the principal mountain ranges indicated more than the normal amount of water in the streams.—R. F. YOUNG, *Section Director.*

WYOMING.

Although but a moderate amount of snow has fallen during the winter, conditions have been such as to promise a fair supply of water for the coming season. The temperature has been low generally with sufficient melting to cause the snow to pack well without dissipation. During the month of March an average of 24.5 inches augmented that already stored in Yellowstone Park. On the headwaters of the Snake River much less snow is reported than at the same time last season, but it is reported as well packed. A normal amount is reported at high elevations, promising a sufficiency of water for late in the season.—R. Q. GRANT, *Section Director.*

IDAHO.

The snowfall from the Salmon River northward was the heaviest of recent years, and continued low temperatures have prevented rapid melting, so that the mountains of that section are covered by from 1 to 12

feet of solid snow, while there is still much snow remaining in many of the valleys. Hence the outlook is for a heavy flow of water in the streams of that section.

South of the Salmon River the snowfall was much below normal, but the temperatures were persistently low, so that in the higher mountains the snowfall of practically the entire winter still remains. The snow is generally solid, but is less drifted than usual, and there have been few slides. It is believed that the waterflow from this section will be below normal, but that the deficiency will not be serious.—EDWARD L. WELLS, *Section Director.*

WASHINGTON.

The snowfall in the mountains has been the heaviest of any season in the last 14, possibly 20, years, or since the great snowfall of 1893. While not severe, the winter was uniformly cold, consequently the snow melted slowly and less than usual, so that the depth remaining is comparatively great. High winds have piled it in great drifts, and in some places it is packed to nearly the consistency of ice.

The season's snowfall to the end of March at Snoqualmie Pass, in the Cascade Mountains, was 540 inches; in 1912 it was 416; in 1911, 327; in 1910, 422 inches.

In general the December snowfall was two to three times the average; in January it was the heaviest in 14 to 20 years; in February it was light, much less than average; and in March it was considerably more than average.—G. N. SALISBURY, *Section Director.*

OREGON.

Snow fell earlier than usual this winter, small amounts having fallen in October in many elevated sections, while above the 4,000-foot level the snowfall in a few localities was considerable. Although much snow fell during November in the higher levels, yet, in general, the quantity was below normal. Nearly the average amount fell during the latter part of December, and that remaining on the ground at the close of the month was about normal, although not so well packed as usual. Snowfall was heavy in January, and as cool weather obtained generally throughout the month very little melted, but instead great quantities drifted into ravines, canyons, and exposed places in the forests. The February snowfall was below normal, but temperatures were low, which hindered melting, and as practically all of the fall for the preceding two months had remained on the ground the amount on March 1 approximated the normal except in the Blue Mountains, where it was deeper than usual. March was cool, with snowfall above the average; that remaining on the ground April 1 was up to the average in the valleys and more than usual in elevated sections where drifting had caused a solid snow pack. In some localities it was nearly the consistency of ice, and in general favorably conditioned for slow melting and a gradual run-off under normal weather conditions in April and May. In most agricultural sections the soil is well saturated with moisture, as the early snow fell on unfrozen ground.—E. A. BEALS, *Section Director.*

TABLE 1.—Climatological data for March, 1913. District No. 12—Montana.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Montana.																				
Anaconda.....	Deer Lodge.....	5,300	11	27.2	-4.2	53	4	-16	25	37	1.02	+0.22	10.2	9	8	17	6	C. D. Demond.		
Butte.....	Silver Bow.....	5,716	18	27.1	-3.1	60	8†	-13	20	40	0.64	-0.36	0.34	9.0	7	7	12	nw.	J. R. Wharton.	
Columbia Falls.....	Flathead.....	3,100	17	26.0	-6.6	50	8	-12	20	41	1.86	+0.72	0.37	22.5	8	8	6	sw.	J. M. Grist.	
Como.....	Ravalli.....	3,700	4	34.4	-3.7	59	8	-2	21	39	1.02	-0.25	4.1	9	9	14	8	Hiram Platt.		
Dayton.....	Flathead.....	8	29.8	-3.7	54	9	-8	20	30	1.79	+0.88	0.25	5.5	10	17	0	sw.	A. J. Ruechell.		
Deer Lodge.....	Deer Lodge.....	4,529	1	25.1	.....	51	8	-13	20	39	0.65	-0.68	0.50	2.3	2	14	15	2	H. B. Grant.
East Anaconda.....	do.....	5,500	7	25.1	.....	51	8	-13	20	39	0.65	-0.68	8.4	8	17	6	s.	C. D. Demond.	
Fortine.....	Lincoln.....	2,975	7	26.4	.....	55	8	-28	20	50	1.82	-0.17	0.50	14.9	12	10	8	sw.	Mike Petery.
Hamilton.....	Ravalli.....	3,575	10	34.0	-3.5	59	8	-1	21	33	0.45	-0.17	0.20	3.2	7	10	3	n.	Hamilton Chamber of Com.	
Hat Creek.....	Powell.....	6,000	3	28.9	.....	50	7†	-16	25	46	1.18	-0.22	1.03	11.9	15	6	5	sw.	M. K. Landreth.
Haugan.....	Missoula.....	3,150	1	26.9	.....	54	7†	-3	25	32	5.53	-0.65	1.10	3.5	15	10	21	w.	U. S. Forest Service.
Heron.....	Sanders.....	2,261	1	32.2	.....	49	9	-12	20	34	1.73	+0.65	0.04	14.0	12	7	10	w.	E. Knott.
Kalispell.....	Flathead.....	2,965	14	26.6	-6.4	49	9	-13	25	48	0.95	-0.91	0.30	8.8	11	14	8	w.	U. S. Weather Bureau.	
Libby.....	Lincoln.....	2,055	3	30.6	-5.2	65	29	-13	25	48	1.18	+0.14	0.21	16	16	0	31	sw.	U. S. Forest Service.	
Missoula.....	Missoula.....	3,225	33	31.6	-3.2	56	8	-2	20	31	2.46	+1.15	0.65	31.0	16	0	31	w.	U. S. Weather Bureau.	
Ovando.....	Powell.....	4,207	13	25.0	-3.2	48	8	-20	21	45	0.65	-0.65	3.70	21.0	6	10	14	7	S. B. Muchmore.	
Phillipsburg.....	Granite.....	5,275	9	29.1	-1.9	58	8	-13	25	41	1.00	-0.07	0.60	9.0	5	16	7	n.	G. T. Bramble.	
Plains.....	Sanders.....	2,475	14	32.0	-4.4	56	7	-3	25	42	0.81	+0.30	0.25	6.5	6	5	13	w.	James M. Self.	
Pleasant Valley.....	Flathead.....	3,500	5	23.7	.....	50	8	-39	25	59	2.59	-0.60	21.9	12	12	12	w.	A. D. Stillman.	
Polson.....	do.....	2,920	5	29.7	.....	55	8	-1	20	29	1.68	-0.50	21.0	6	10	14	7	F. P. Brown.	
St. Ignatius.....	Missoula.....	2,700	7	30.6	.....	56	8	-12	21	43	0.76	-0.22	12.0	6	10	14	7	E. K. Tarbox.	
Saltse.....	do.....	3,600	8	32.3	.....	56	8†	0	20†	31	1.06	-0.28	2.1	11	11	8	12	s.	University Orchard Co.
Stevensville.....	Ravalli.....	2,462	1	32.4	.....	53	9	-9	25	40	2.51	-0.69	13.2	14	8	8	15	w.	U. S. Forest Service.
Tompson Falls.....	Sanders.....	2,375	1	32.4	.....	53	9	-9	25	40	2.27	-0.40	19.4	10	13	0	18	sw.	James Hylent.
Trot Creek.....	do.....	5,064	2	27.6	.....	58	10	-18	25	45	0.53	-0.38	7.0	2	11	2	18	sw.	G. E. Luce.
Wyoming.																				
Afton.....	Lincoln.....	6,200	9	27.0	.....	69	31	-13	14	45	1.78	-0.33	18.0	11	10	2	19	s.	A. V. Call.
Alta.....	do.....	7,000	3	22.2	.....	47	31	-28	26	44	1.56	-0.63	2.83	20.1	10	6	8	sw.	Mrs. Lucy Brown.
Bechler River.....	Yellowstone Park.....	1	.....	.....	.....	68	31	-20	26	45*	1.68	0.00	0.58	28.3	10	6	9	w.	U. S. Army.
Bedford.....	Lincoln.....	5,900	13	23.2	-2.7	68*	31	-20	26	45*	0.36	-0.37	0.20	24.5	10	10	10	w.	C. G. Heinier.	
Moran.....	do.....	1	19.6	.....	45	30†	-18	26	51	2.38	-0.50	16.5	12	2	10	13	w.	U. S. Reclamation Service.	
Snake River.....	Yellowstone Park.....	7,000	7	20.4	.....	50	31	-30	27	57	7.10	-0.97	42.0	19	10	9	12	w.	U. S. Army.
Nevada.																				
San Jacinto.....	Elko.....	8	31.5d	.....	67†	31	6	20	39†	0.07	-0.02	0.4	4	9	8	14	e.	F. W. Merchant.	
Utah.																				
Standrod.....	Box Elder.....	8	33.6	.....	67	31	7	20	24	0.58	-0.15	7.7	7	11	10	10	sw.	T. B. Jones.	
Idaho.																				
Albion.....	Cassia.....	4,650	10	36.9	-1.6	68	16	6	21	40	0.55	-0.63	0.10	0.5	4	11	15	w.	C. E. Bocock.	
Almo.....	do.....	3	.....	.....	.....	68	16	6	21	40	0.26	-0.56	0.32	T.	19	9	3	w.	Wm. D. Cahoon.
American Falls.....	Power.....	4,341	21	34.1	-1.4	69	31	6	10†	50	1.02	-0.56	1.26	7.7	16	11	8	ne.	Geo. Stoll.	
Arrowrock.....	Boise.....	3,100	1	37.4	.....	68	31	11	26	35	3.60	-0.60	0.20	7.7	6	7	5	w.	U. S. Reclamation Service.
Blackfoot.....	Bingham.....	4,503	17	32.0	-3.3	65	31	-5	26	40	0.60	-0.37	0.45	16.5	12	2	17	w.	E. A. Dowd.	
Blackfoot Dam.....	Bannock.....	6,200	3	32.7	.....	49	31	-20	26	44	2.07	-0.60	1.14	16.5	13	5	16	w.	S. C. Waddell.
Bogus Creek.....	Boise.....	4,200	4	.....	49	31	-20	26	44	2.07	-0.60	0.45	16.5	12	2	17	w.	F. P. Ingraham.	
Boise.....	Ada.....	2,739	27	38.9	-3.3	64	31	18	26	29	1.75	+0.31	0.48	1.2	14	5	5	nw.	U. S. Weather Bureau.	
Bonners Ferry.....	Kootenai.....	1,850	6	30.1	.....	54	8	-5	25	35	0.62	-0.12	1.0	7	12	9	11	sw.	W. H. Heideman.
Boulder Mine.....	Boise.....	4,800	3	.....	66	31	12	20†	33	0.61	-0.53	1.53	31.9	16	11	9	11	w.	Patrick Moriarty.
Buhl.....	Twin Falls.....	3,800	6	38.0	.....	66	31	12	20†	33	0.61	-0.35	0.35	3.5	5	7	13	w.	S. C. Orr.
Caldwell.....	Canyon.....	2,372	8	38.8	.....	68	10	14	26	42	1.00	-0.30	T.	8	3	17	w.	W. J. Boone.	
Caldwell Exp. Station.....	do.....	1	37.1	.....	67†	31	9	26	40*	0.97	-0.27	0.70	5.5	9	7	6	18	nw.	Caldwell Exp. Station.
Cambridge.....	Washington.....	2,651	17	33.1	-4.3	63	14	4	1	50	2.38	+0.33	1.20	22.5	9	10	15	w.	Chas. H. Shephard.	
Cedar Creek Dam.....	Twin Falls.....	5,220	2	32.4	.....	54	7	1	20	31	4.24	-0.56	1.30	13.2	16	6	4	sw.	Robert Hofninan.
Chesterfield.....	Bannock.....	5,424	16	28.4	-0.3	59	31	2	9	38	0.22	-1.22	0.22	T.	1	7	16	w.	Chas. S. West.	
Clarks Fork.....	Bonner.....	2,084	1	31.8	.....	51	8	-6	20	29	4.57	-0.88	13.5	18	8	11	12	w.	Wm. Potter.
Clyde.....	Custer.....	6,000	1	31.0	.....	66	10	18	26	36	1.51	-0.36	0.15	T.	5	15	12	w.	R. L. Sutcliffe.
Council.....	Adams.....	3,059	1	31.0	49	31	0	26	35	5.35	-0.30	1.30	4.0	13	6	6	19	w.	F. L. Featherston.
Culdesac.....	Nez Perce.....	1,520	4	37.0	.....	58	7†	10	20	34	3.35	-0.60	14.4	18	6	12	13	w.	Mrs. B. B. Caldwell.
Deary.....	do.....	2,854	1	32.2	.....	54	7	1	20	31	4.24	-0.52	1.30	13.2	16	6	4	sw.	W. J. Davis.
Dent.....	Clearwater.....	1,350	7	33.6h	64b	9	2b	21	42b	2.84	-0.34	1.22	10.2	17	5	8	18	w.	Emil Schuessler.
Driggs.....	Fremont.....	6,097	6	22.2	.....	47	11†	-27	26	47	1.47	-0.50	17.5	7	6	4	21	w.	Walter H. Durrant.
Emmett.....	Canyon.....	2,350	6	38.8	66	10	18	26	36	1.51	-0.36	0.15	T.	5	15	8	12	n.	U. S. Forest Service.
Forney.....	Lemhi.....	6,000	12	.....	68	31	15	26	36	4.40	-0.69	26.7	17	17	0	9	w.	M. B. Merritt.	
Garnet.....	Elmore.....	2,575	13	42.2	-4.0	74	31	14	26	39	0.50	-0.39	0.50	0	1	16	5	10	e.	Asa A. Kenison.
Glenns Ferry.....	Gooding.....	2,569	4	41.1	74	31	17	25	43	0.63	-0.18	0.18	T.	7	17	5	9	nw.	I. E. Perkins.
Gooding.....	Gooding.....	3,572	3	36.1	.....	68	31	9	26	39	0.55	-0.12	0.40	4	10	5	12	w.	John Krall, jr.
Grand Forks.....	Shoshone.....	3,000	3	29.7	.....	52	8†</												

TABLE 1.—Climatological data for March, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of partly cloudy days.				
<i>Idaho—Continued.</i>																					
Meridian.	Ada.	2,657	2	38.4	—	68	10†	15	26	38	1.20	—	0.34	0.6	13	5	10	nw.	A. W. Garrett.		
Mesa.	Adams.	3,275	2	31.0	—	50	4†	5	26	35	3.46	—	0.78	2.3	10	5	0	n.	I. S. Carter.		
Middle Fork.	Idaho.	1,397	2	37.2*	—	56	6†	14*	21	27*	4.77	—	0.75	—	16	—	—	—	Jos. McGhee.		
Milner.	Twin Falls.	4,110	9	36.6	—	63	31	12	20	34	0.44	—	0.20	T.	5	5	20	w.	James K. Young.		
Moore.	Blaine.	5,700	26	38.8*	—	62	30	—	38	41	0.34	—	0.17	1.7	5	9	0	22	Chas. B. Lemon.		
Moscow.	Latah.	2,748	20	32.6	—	4.8	52	9	7	25	29	4.52	+ 2.47	0.80	16.2	15	6	20	Univ. of Idaho.		
Mountainhome.	Elmore.	3,150	7	37.5	—	69	31	8	26	39	0.86	—	0.21	0.5	9	8	11	12	Mrs. Ellen Manion.		
Murtough.	Twin Falls.	6	35.0*	—	67	31	8*	21	38	0.27	—	0.25	2.5	2	—	—	—	—	J. E. Steinour.		
New Meadows.	Adams.	3,950	8	25.2	—	46	4†	19	26	44	3.21	—	1.00	22.0	16	5	14	12	Lee Higley.		
Nezperce.	Lewis.	3,082	3	32.1	—	53	8†	6	20	27	2.60	—	0.45	10.0	12	9	10	P. Mitchell.			
Oakley.	Cassia.	4,700	19	37.5	—	1.0	74	31	9	22	39	0.25	—	0.20	2.0	3	11	20	John Adams.		
O'Hara Bar.	Idaho.	1,557	2	36.8	—	62	9	9	21	38	5.70	—	1.13	14.7	18	5	19	7	J. D. Agnew.		
Orofino.	Clearwater.	1,027	8	36.8	—	62	9	9	21	38	5.70	—	1.13	14.7	18	5	19	7	Geo. Alteneder.		
Payette.	Canyon.	2,159	21	38.8	—	3.4	65	31	15	26	34	0.80	—	0.37	0.23	2.0	8	6	E. F. Allen.		
Pierson.	Elmore.	7,000	4	18.9	—	47	1†	22	25	54	1.78	—	0.65	20.0	5	11	4	16	David P. Clarke.		
Pine.	Elmore.	4,100	3	37.4	—	65	31	13	26	33	1.30	—	0.94	9.5	9	4	8	C. E. Friedrich.			
Pleasant Valley.	Ada.	3,000	5	37.4	—	65	31	13	26	33	1.30	—	0.31	1.2	10	9	7	U. S. Weather Bureau.			
Pocatello.	Baileys.	4,483	13	35.0	—	1.9	66	31	2	26	33	1.28	—	0.25	10.2	14	4	8	Mrs. Fannie F. Say.		
Pocatello Nursery.	do.	5,396	6	36.6	—	60	31	10	26	32	1.06	—	0.25	10.0	8	8	10	C. M. Lawrence.			
Poplar.	Bonneville.	5,500	3	27.3	—	60	31	—	26	32	1.06	—	0.43	10.7	13	7	13	H. A. French.			
Porthill.	Bonner.	1,665	23	30.6	—	4.1	53	31	—	1	29	1.58	+ 0.22	0.39	5.0	6	11	11	Mrs. Mary French.		
Powers Ranch.	Boise.	4,300	3	30.2	—	49	9	—	21	29	2.19	—	0.45	10.9	13	7	13	D. R. Brewster.			
Priest River Experiment Station No. 1.	do.	2,500	1	31.8	—	55	9	—	21	37	2.09	—	0.43	10.7	13	7	13	Do.			
Priest River Experiment Station No. 2.	do.	2,500	1	31.8	—	55	8†	—	21	45	2.17	—	0.44	11.0	13	7	13	Do.			
Priest River Experiment Station No. 3.	do.	1	30.2	—	55	8†	—	21	45	2.17	—	0.44	11.0	13	7	13	Heber C. Sharp.				
Pyle Creek.	Bolse.	3,100	3	—	—	—	—	—	—	—	5.36	—	1.84	8.0	13	7	11	13	P. V. Smith.		
Rattlesnake Creek.	Elmore.	4,000	3	—	—	—	—	—	—	—	3.25	—	0.85	2.0	15	7	13	11	Richard M. Green.		
Richfield.	Lincoln.	4,306	3	31.9	—	64	31	6	1	36	0.41	—	0.15	2.0	5	7	17	nw.	Idaho Irrigation Co.		
Roseberry.	Boise.	4,872	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Rev. T. P. Graham.			
Roseworh.	Twin Falls.	4,650	2	—	—	—	—	—	—	—	0.59	—	0.24	6.1	6	2	18	11	D. B. Hartwell.		
Rupert.	Minidoka.	4,204	6	35.4	—	68	31	2	2	40	0.33	—	0.10	0.8	9	7	9	15	Will Parry.		
St. Anthony.	Fremont.	4,968	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Heber C. Sharp.			
St. Maries.	Kootenai.	2,203	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. S. Turnbull.			
St. Michael's Priory.	Idaho.	3,811	—	31.0	—	55	8	4	20†	24	4.11	—	0.62	21.5	18	4	8	19	P. V. Smith.		
Salmon.	Lemhi.	4,040	7	32.8	—	60	31	5	26	30	0.96	—	0.30	4.4	14	3	20	8	Richard M. Green.		
Sandpoint.	Bonner.	2,086	2	32.6	—	54	8	7	25	30	1.95	—	0.42	9.0	11	7	7	17	Idaho Irrigation Co.		
Sheep Hill.	Boise.	5,000	3	—	—	—	—	—	—	—	—	—	—	1.52	14.7	16	6	9	Rev. T. P. Graham.		
Shoshone.	Lincoln.	3,968	5	34.6	—	65	31	11	26	35	0.28	—	0.08	1.2	6	3	26	2	Clifford M. Gardner.		
Silver City.	Owyhee.	6,280	5	—	—	—	—	—	—	—	—	—	—	0.56	12.8	18	4	14	Zell Truman.		
Smith Prairie.	Elmore.	5,200	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Russell Stoddard.			
Soldier Creek.	Blaine.	5,755	2	26.6	—	49	31	—	21	30	1.26	—	—	—	—	—	—	—	William W. Newell.		
Spirit Lake.	Kootenai.	2,560	2	32.8	—	60	31	7	21	38	2.38	—	0.54	12.2	9	17	0	14	J. E. Minear.		
Springfield.	Bingham.	4,420	4	33.2*	—	62	31	—	26	41	0.30	—	0.24	3.2	2	11	13	7	M. C. Krause.		
Spring Hill.	Ada.	3,607	—	38.6*	—	—	—	—	—	—	—	—	—	0.55	3.0	10	6	9	Mrs. W. A. Edwards.		
Sugar.	Fremont.	4,892	5	26.4	—	60	31	—	24	46	0.61	—	0.40	10.0	4	9	8	14	Ray G. Lyons.		
Sunnyside.	Elmore.	3,500	3	42.1	—	68	18	8	20	58	0.72	—	0.21	T.	7	—	—	—	Utah-Idaho Sugar Co.		
Tripod Mountain.	Boise.	4,300	3	—	—	—	—	—	—	—	—	—	—	0.69	8.5	17	8	4	Col. M. W. Wood.		
Twin Falls.	Twin Falls.	3,825	7	36.8	—	68	30†	11	20†	39	0.65	—	0.20	2.5	11	2	22	7	Mrs. Verna Paddock.		
Vernon.	Fremont.	5,050	14	25.8	—	3.4	54	31	—	26	41	0.73	—	0.88	0.27	8.0	4	12	J. A. Waters.		
Wallace.	Shoshone.	2,728	5	31.7	—	53	8	—	25	31	5.32	—	1.25	—	—	—	—	—	A. M. Slattery.		
Weiser.	Washington.	2,114	1	39.4	—	78	31	17	26	36	1.01	—	0.27	0.5	10	2	10	19	U. S. Weather Bureau.		
Wendell.	Gooding.	3,400	4	38.0	—	70	31	15	20	30	0.29	—	0.12	2.0	4	13	12	J. W. Lapish.			
<i>Washington.</i>																			Charles L. Dingler.		
Aberdeen.	Chahals.	162	22	42.4	—	1.7	65	9	22	25	34	6.19	—	1.55	1.22	4.0	14	9	7	H. A. Benham.	
Anacortes.	Skagit.	60	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Anatone.	Asofotin.	2,800	—	30.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Baker.	Skagit.	390	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Bellingham.	Whatcom.	60	18	41.6	—	2.7	60	4	18	20	29	1.94	—	0.67	0.54	T.	14	13	4	S. B. Mayhew.	
Bellingham (near).	do.	107	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Blaine.	do.	57	16	40.0	—	0.8	56	5	20	21†	24	4.00	+ 0.73	1.23	0.1	18	2	16	13	I. M. Scott.	
Blewett.	Chelan.	2,200	4	—	—	—	—	—	—	—	—	—	—	—	1.42	5.0	8	22	7b	John Birmeister.	
Bremerton.	Kitsap.	40	15	—	—	—	—	—	—	—	—	—	—	—	1.73	4.8	11	7	17	U. S. Navy Yard.	
Brewster.	Okanogan.	1,620	3	35.1	—	54	29	19	20	25	0.01	—	0.01	T.	1	15	10	6	se.	Mrs. H. T. Bertram.	
Buckley.	Pierce.	685	—	40.0	—	63	7	19	20	33	3.59	—	0.90	6.3	17	5	9	17	George C. Sears.		
Bumping Lake.	Yakima.	3,400	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	George Laudsburg.		
Cedar River.	King.	535	6	—	—	—	—	—	—	—	—	—	—	—	0.65	3.3	14	7	24	I. S. Turner.	
Centralia.	Lewis.	212	20	42.4	—	2.0	70	7	16	25	35	2.57	—	1.45	0.78	0.5	17	6	13	12	George Gibbs.
Clearbrook.	Whatcom.	140	10	39.6	—	2.7	64	9	18	20	38	5.16	—	1.22	1.42	2.0	14	7	17	J. A. Balmer.	
Cle Elum.	Kittitas.	1,930	14	34.6	—	3.2	57	8	0	25	36	1.73	—	0.62	0.55	8.5	9				

TABLE 1.—Climatological data for March, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Washington—Contd.</i>																			
Gold Hill.	Yakima.	4,454	7	39.7	63	8†	17	20	33	1.16	0.35	4.0	10	3	21	7	w.	Klickitat Co. Abstract Co.
Goldendale.	Klickitat.	1,600	7	39.7	5.12	-0.16	0.93	9.4	7	8	16	e.	C. H. Clever.
Granite Falls.	Snohomish.	397	10	.....	.....	.....	.....	.....	.....	.....	0.05	0.4	1	9	17	5	n.w.	Frank Kuehnle.
Grays River.	Wahkiakum.	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.05	T.	3	3	8	20	sw.	Frances Le Bash.
Guler.	Klickitat.	2,200	4	.....	.....	.....	.....	.....	.....	.....	0.66	3.0	11	6	6	19	.....	Dr. A. V. Marlon.
Hanford.	Benton.	385	8	43.2	70	13†	17	26	47	0.05	0.27	3.0	3	6	14	11	Mrs. S. J. Hill.
Hatton.	Adams.	1,100	8	39.2	.....	61	8†	13	25	33	0.10	0.05	0	1	14	8	sw.	Mrs. Theo. Wheeler.
Huntsville.	Columbia.	1,400	5	.....	.....	.....	.....	.....	.....	.....	0.81	0.90	3.0	5	.....	.....	.....	R. E. Reed.
Irene Mountain.	Okanogan.	2,700	4	.....	.....	.....	.....	.....	.....	.....	0.24	0.12	2.2	2	7	13	n.	A. O. Jeffries.
Kennewick.	Benton.	368	18	43.9	-3.2	65	9	17	19	37	0.04	-0.37	0.02	2	Harry H. Cole.
Kent.	King.	53	42.0	63	7	15	20	30	2.49	0.66	3.0	11	6	6	19	F. S. Hedger.
Kettle Falls.	Stevens.	1,265	4	33.9	.....	55	29†	8	21	32	0.63	0.05	0	1	14	8	sw.	J. A. Ulsh.
Kiona.	Benton.	430	7	42.8	.....	62	9†	16	21	33	0.05	0.05	0	1	14	8	ne.	Joseph Brothers.
Kosmos.	Lewis.	775	7	40.8	.....	69	8	18	20	38	4.81	0.81	18.0	17	6	23	2	M. E. Schreck.
La Center.	Clarke.	250	16	39.0	-4.2	65	7	19	25	36	5.22	+0.62	1.08	5.5	4	15	12	U. S. Reclamation Service.	
Lacrosse.	Whitman.	1,400	4	39.0	.....	59	9	10	25	30	1.48	0.36	7.0	11	8	5	18	Do.
Lake Clealum.	Kittitas.	2,171	4	33.6	.....	55	8	25	31	3.09	0.92	10.0	9	1	6	24	.....	Do.
Lake Kachess.	do.	2,235	5	33.2	.....	53	8†	3	20	31	1.00	20.0	14	8	2	21	w.	W. H. Van Meter.
Lake Keechelus.	do.	2,479	5	.....	.....	.....	.....	.....	.....	4.46	.....	88.3	9	6	16	.....	Mrs. Minnie E. Strout.	
Lakeside.	Chelan.	1,116	22	37.7	-2.5	57	17	16	20	24	0.11	-0.77	0.09	0.5	2	4	23	w.	Mrs. J. S. Myers.
Laurel.	Klickitat.	1,900	4	3.31	1.02	3.3	12	6	10	15	U. S. Engineer Corps.
Laurier.	Ferry.	1,644	3	33.2	.....	55	29	5	21	32	0.81	0.17	7.0	9	9	13	se.	P. H. Leese.
Lone Tree.	Chehalis.	9	4	42.7	55	7†	27	20	15	5.40	1.02	3.5	19	3	18	10	n.w.	Lucien Conibe, jr.
Longmires Springs.	Pierce.	2,800	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Mary McCumber.
Lost Creek.	Okanogan.	3,125	4	.....	.....	.....	.....	.....	.....	.....	T.	T.	0	8	18	5	n.	H. M. Flemming.
McConihe.	Grant.	1,072	2	38.3	.....	58	9	17	21	30	T.	T.	0	14	5	12	n.	G. H. Mottinger.
McCumbres Ranch.	Yakima.	2,182	3	.....	.....	.....	.....	.....	.....	.....	1.80	0.70	0	8	16	8	s.	Wm. M. Dorr.
Moses Lake.	Grant.	1,070	2	.....	.....	.....	.....	.....	.....	.....	T.	T.	0	21	1	9	n.	H. B. Scudder.
Mottinger.	Benton.	307	13	45.4	-3.3	65	9†	24	21	33	0.75	-0.08	0.16	T.	8	16	12	3	Chas. M. Talmadge.
Mount Pleasant.	Clallam.	500	2	37.4	.....	58	7	17	20	24	1.60	0.31	3.5	10	9	10	12	Steve Nagy.
Moxee.	Yakima.	1,000	21	40.4	-2.3	66	8	14	25	40	T.	T.	0	11	12	8	w.	U. S. Weather Bureau.	
Newport.	Stevens.	2,400	3	29.8	.....	53	8	-5	25	37	1.66	0.33	6.0	14	8	8	15	Ruth J. Shepard.
Nighthawk.	Okanogan.	3,050	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.0	.....	.....	.....	.....	W. F. Case.
North Head.	Pacific.	211	11	42.5	-2.4	63	6	30	20	20	3.35	-1.90	0.74	T.	20	6	5	20	Albert Bender.
North Sundale.	Klickitat.	4	42.1	61	9	19	25	29	0.42	0.13	0.13	6	H. W. Rieke.
Northport.	Stevens.	1,350	14	34.4	-2.4	59	31	7	20	31	0.92	-0.27	0.19	4.0	10	17	12	2	Cecil S. Willis.
North Yakima.	Yakima.	1,070	4	41.0	.....	66	8	16	25	36	0.02	0.02	0.2	1	9	12	10	M. O'Connor.
Odessa.	Lincoln.	1,540	10	36.9	.....	56	9	17	20	28	0.42	0.15	3.0	5	7	23	1	Saint John Umbrage.
Olga.	San Juan.	50	23	41.7	-1.6	53	6	21	19	17	1.69	-0.66	0.63	T.	6	8	14	9	M. C. Jackman.
Olympia.	Thurston.	45	35	41.9	-2.5	65	7	17	20	33	2.0	-1.78	1.00	1.0	17	9	5	17	Samuel Gruell, sr.
Onak.	Okanogan.	850	4	37.2	.....	62	9	11	21	37	0.31	0.31	T.	1	12	9	10	Peter McClung.
Oroville.	do.	922	3	36.2	.....	60	8†	11	21	33	T.	T.	0	10	11	10	n.	U. S. Weather Bureau.
Peola.	Garfield.	5,000	4	.....	.....	.....	.....	.....	.....	.....	3.62	0.85	25.1	10	17	7	7	Charles Shoemaker.
Pomeroy.	do.	1,500	21	38.4	-4.2	60	9	9	20	32	2.92	+1.05	0.55	8.0	13	6	9	16	George E. Thompson.
Port Crescent.	Clallam.	259	18	37.5	-3.0	52	9	22	20	23	1.46	-2.46	0.46	0.6	19	22	16	13	U. S. Weather Bureau.
Port Townsend.	Jefferson.	80	23	41.9	-2.5	55	31	24	21	22	1.03	-0.71	0.43	0.5	10	8	7	16	Frank Plummer.
Frosser.	Benton.	661	42.8	64	18	12	21	33	0.06	0.06	0.24	0.43	9	18	4	w.	E. L. Capps.
Pullman.	Whitman.	2,550	21	32.6	-5.9	50	8	7	19	37	3.76	+1.03	1.23	15.0	9	5	14	State Agriculture College	
Quetla River.	Chehalis.	16	2	41.7	.....	57	7	25	25	24	8.07	2.21	3.1	20	9*	7*	14*	C. A. Bullard.
Quispalault.	do.	300	6	41.5	.....	65	6	23	20†	33	13.40	4.02	1.00	1.6	7	12	12	A. V. Higley.
Reardon.	Lincoln.	31.8	—4.3	50	30	10	20	27	30	0.34	1.5	—0.93	0.05	0.0	5	15	6	10	Charles Stocking.
Republic.	Ferry.	2,628	13	32.3	.....	56	8	1	20†	34	0.16	0.05	0.0	5	5	6*	6*	James W. Nicol.
Rex Creek.	Chelan.	1,135	6	36.4*	.....	51*	18†	16*	21	27*	1.35	0.45	T.	5	6*	6*	12*	Agent Northern Pacific Ry.
Ritzville.	Adams.	1,825	14	.....	.....	.....	.....	.....	.....	0.38	0.23	0.23	8	.....	.....	.....	.....	.....
Robertsville.	Klickitat.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Roch Lake.	Whitman.	1,910	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rossula.	do.	2,425	21	33.6	-4.7	51	7†	7	25	26	1.42	-0.16	0.21	5.2	15	7	5	19
Russells Ranch.	Yakima.	2,870	4	.....	.....	.....	.....	.....	.....	.....	1.43	0.32	17.1	15	8	9	14	.....
Seattle.	King.	208	22	41.9	-2.3	55	9	25	20	25	1.55	-2.05	0.35	3.2	15	5	8	18
Sedro Woolley.	Skagit.	38	16	40.2	-4.4	59	7	19	25	30	2.62	-1.35	1.03	0	13	8	9	14	Mrs. H. L. Devin.
Sixprong.	Klickitat.	1,240	4	42.0	.....	62	8†	19	21	28	0.06	0.04	0	0	3	8	6	C. E. Comstock.
Skagit Power Dam.	Whatcom.	510	3	.....	.....	.....	.....	.....	.....	.....	0.04	0.27	3.0	14	7	9	15	.....
Snohomish.	Snohomish.	55	19	42.0	-1.8	63	6†	18	20	30	3.01	-1.00	0.84	8.0	12	17	2	12	se.
Snoqualmie Falls.	King.	667	14	40.6	-3.3	60	9	18	20	31	3.53	-1.50	0.79	5.0	21	10	0	21	James Bylling.
Snoqualmie Pass.	do.	3,000	4	.....	.....	53	17	3	20	37	0.57	0.29	2.0	4	9	18	4	O. W. Wiswell.
Snyders Ranch.	Okanogan.	2,200	4	30.4	.....	56	7	25	20	32	5.95	-2.38	1.40	16	7	9	15	R. E. Chadwick.
South Bend.	Pacific.	140	18	41.4	-4.0	65	9	20	25	32	5.95	-0.92	0.13	0.7	14	4	17	George E. Snyder.	
Spokane.	do.	1,943	32	35.3	-3.6	54	9	12	20	27	0.59	-0.92	0.13	0.7	14	4	20	Mrs. Winifred Buckingham.	
State University.	King.	170	4	41.6	.....	53	7	29	20	36	1.39	0.27	3.0	14	7	9	15	U. S. Weather Bureau.
Stokes Ranch.	Okanogan.	2,670	4	.....	.....	65	7	16	20†	31	0.43	-0.15	4.9	5	8	20	13	University of Washington.
Summer.	Pierce.	77	5	41.8	.....	63	7	16	20†	31	2.50	0.84	3.1					

TABLE 1.—Climatological data for March, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Oregon.</i>																				
Albany.	Linn	212	31	44.0	-2.9	69	7	22	25	34	5.26	+0.99	1.26	3.0	21	6	3	22	s.	F. M. French.
Alpine.	Benton	350	16	47.8 ^b	+0.3	65 ^b	9	23 ^b	25	34 ^b	5.67	+0.36	1.50	2.5	8	6 ^b	11 ^b	6 ^b	sw.	J. D. McPherson, Jr.
Ashland.	Jackson	1,963	29	44.0	-1.3	70	6	25	15 ^b	20	5.74	-0.77	1.29	0.23	19	9	8	14	nw.	G. G. Eubanks.
Astoria.	Clatsop	16	52	43.6	-2.4	64	7 ^b	29	20	24	5.74	-1.62	1.22	2.22	7	3 ^b	4 ^b	16 ^b	sw.	Irving Club.
Austin.	Grant	4,250	2	27.6 ^b	-	62 ^b	10	19	26	56 ^b	2.00	-0.45	1.50	7	3 ^b	20	nw.	U. S. Forest Service.		
Baker.	Baker	3,466	23	32.7	-2.7	53	29	6	20	24	1.60	+0.16	0.49	11.0	19	6	5	20	nw.	U. S. Weather Bureau.
Bend.	Crook	3,629	8	37.7	-	67	7	8	22	41	0.13	-0.08	2.5	2	19	9	3	20	sw.	Bend Bulletin.
Blackbutte.	Lane	1,200	12	40.6	-2.4	62	7	24	15	29	6.30	+1.19	1.60	8.0	18	10	2	19	nw.	William Harris.
Blalock.	Gilliam	237	15	45.7 ^b	-2.8	63 ^b	16	24 ^b	20	25 ^b	0.78	+0.05	0.48	4.0	2	7 ^a	7 ^a	16 ^a	w.	Geo. W. Long.
Brogan.	Malheur	2,600	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. M. Addington.
Burns.	Harney	4,157	22	35.2	+0.7	64	9	8	24 ^b	39	0.86	-0.21	0.15	4.6	10	8	9	14	sw.	J. C. Welcome, Jr.
Cascade Locks.	Hood River	100	23	42.4	-3.1	64	8 ^b	22	25	30	11.54	+3.66	2.58	4.0	19	7	3	21	w.	Val W. Tomkins.
Cazadero.	Clackamas	503	4	44.4	-	71	6	23	25	39	9.21	-	2.70	7.5	22	5	7	19	se.	Alf Drill.
Clear Lake.	Linn	3,030	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	R. B. Grondahl.
Cliff.	Lake	4,300	6	34.0	-	63	9	-3	14	43	0.26	-	0.06	0.5	7	6	10	15	sw.	John C. Green.
Condon.	Gilliam	2,884	6	36.2	-	58	8	2	25	32	1.22	-	0.28	3.0	11	14	7	10	sw.	C. F. Kennedy.
Corvallis.	Benton	266	25	44.8	-0.2	66	7 ^b	24	25	32	4.33	-0.30	1.38	2.0	18	5	2	24	sw.	Oreg. Agricultural College.
Crescent.	Klamath	4,400	1	32.7	-	64	7 ^b	-13	25	54	1.06	-	12.0	16	9	6	16	sw.	C. W. Long.	
Dayville.	Grant	2,200	19	40.6	-2.9	66	7	17	26	43	0.60	-0.60	0.19	3.0	11	9	15	7	nw.	J. Campbell-Martin.
Deadwood.	Lane	350	3	45.4	-	68	7 ^b	31	15	32	13.24	-	3.57	3.4	22	0	17	14	sw.	Jos. Slemon.
Doraville.	Columbia	600	11	40.3	-3.1	64	7	20	25	33	4.17	-0.70	0.69	9.0	20	3	9	19	nw.	Jos. Hackenberg.
Drain.	Douglas	300	11	46.2	-	70	7	27	25 ^b	33	5.17	-	1.44	19	4	5	22	w.	Ira Wimberly.	
Echo.	Umatilla	625	9	42.2	-	63	9 ^b	14	20	31	1.16	-	0.32	4.0	6	9	4	18	w.	R. B. Stanfield.
Ella.	Morrow	830	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	se.	Carl F. Troedson.
Eugene.	Lane	449	23	45.8	+0.1	69	13 ^b	18	25	34	3.83	-0.04	1.17	0.5	19	3	6	22	sw.	Paul G. Bond.
Fairview.	Coos	142	17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	William Bettys.
Forest Grove.	Washington	220	24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	Pacific University.
Gardiner.	Douglas	72	24	43.2	-3.9	68	7	29	24	30	9.99	+0.72	2.70	—	18	—	—	—	sw.	Wm. S. Angus.
Glendale.	do.	1,441	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	B. J. Simpson.
Glenora.	Tillamook	575	22	40.4	-2.3	70	7	19	25	42	12.93	+0.39	2.00	16.0	20	5	4	22	sw.	Mrs. J. A. Reeher.
Gold Beach.	Curry	40	12	45.7	-1.9	59	7	31	25	48	8.49	-3.17	1.10	16	13	13	5	5	n.	John W. Riley.
Grants Pass.	Josephine	956	25	45.1	-0.9	75	7	20	15	48	1.62	-2.20	0.82	12	5	9	17	sw.	John B. Paddock.	
Grass Valley.	Sherman	2,381	12	39.0	-2.1	70	16	5	25	35	1.28	+0.38	0.40	3.0	5	7	7	7	w.	Agent O.-W. R. & N. Co.
Gurdane.	Umatilla	3,500	4	32.5	-	50	4	1	20	36	0.15	-	0.05	10.5	6	5	16	10	s.	Miss Belle Ely.
Headworks.	Clackamas	719	11	41.6	-2.3	74	9	22	25	45	11.60	+3.88	2.78	9.0	18	7	5	19	e.	Portland Water Works.
Heppner.	Morrow	1,950	23	39.9	-2.7	59	29 ^b	7	20	27	1.82	+0.21	0.28	6.8	16	2	20	9	w.	Frank Gilliam.
Hermiston.	Umatilla	451	6	43.6	-	64	9	17	25	37	0.17	-	0.17	T.	6	6	13	12	w.	C. W. Kellogg.
Hillcrest Orchard.	Jackson	1,595	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	R. H. Parsons.
Hollywood Orchard.	Jackson	1,400	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	A. C. Allen.
Hood River.	Hood River	300	23	41.6	-0.9	66	9	21	25	36	3.23	-0.27	1.44	1.0	9	10	11	10	w.	Edward W. Birge.
Hood River, No. 2.	do.	125	1	42.6	-	65	9	24	25	32	4.28	-	1.58	0	11	13	3	15	w.	W. H. Lawrence.
Hood River, No. 3.	do.	620	1	41.8	-	67	8 ^b	22	25	37	3.13	-	1.23	3.8	12	4	16	11	nw.	U. A. Lawrence.
Hood River, No. 4.	do.	850	1	40.6	-	63	9	24	1 ^b	33	3.68	-	1.25	T.	15	13	8	10	w.	P. L. Smith.
Hood River, No. 5.	do.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	J. G. Jarvis.
Huntington.	Baker	2,168	12	39.0	-4.6	63	31	15	26	28	0.73	-1.03	2.22	—	8	3	26	2	w.	Agent O.-W. R. & N. Co.
Jacksonville.	Jackson	1,640	25	44.4	-1.3	72	6	24	15	40	0.70	-2.00	0.29	1.0	2	1	2	17	sw.	E. Britt.
Joseph.	Wallowa	4,400	24	28.8	-3.9	53	8 ^b	2	21	35	2.65	+0.67	0.60	26.5	10	11	1	19	s.	F. F. McCully.
Klamath Agency.	Klamath	4,169	5	28.8	-	45	29 ^b	3	1	32	0.65	-	0.25	6.5	4	6	7	7	w.	N. D. Ginsbach.
Klamath Falls.	do.	4,100	24	33.3	-6.1	60	30	11	14	31	0.50	-0.88	0.12	4.0	9	12	9	10	nw.	Augusta J. Hayden.
La Grande.	Union	2,784	25	35.4	-4.3	58	8	8	20	30	4.57	+2.65	0.75	8.0	20	6	8	17	sw.	W. A. Worstell.
Lakeview.	Lake	4,825	30	31.1	-4.6	57	7 ^b	4	24	32	0.61	-1.17	0.11	5.3	10	10	3	18	s.	C. C. Gott.
McKinzie Bridge.	Lane	1,400	12	39.2	-4.0	68	9	18	25	45	10.54	+3.25	2.34	—	23	5	0	26	sw.	Geo. Frissell.
McMinnville.	Yamhill	182	26	44.6	-0.7	69	7 ^b	23	25	39	4.48	-0.22	1.37	T.	13	7	3	21	sw.	M. E. Pettit.
Marshfield.	do.	34	12	45.9	-1.5	74	6	38	15	40	7.64	-	1.23	—	23	7	1	23	sw.	U. S. Weather Bureau.
Meadow Brook Ranch.	Hood River	850	1	41.2	-	62	8 ^b	20	25	31	3.90	-	1.62	4.0	13	8	15	8	w.	John W. Palmer.
Medford.	Jackson	1,425	3	45.0	-	74	7	26	25	43	0.43	-	0.10	2.5	9	9	9	13	nw.	U. S. Weather Bureau.
Merrill.	Klamath	4,070	8	33.9	-	63	31	5	6	20	0.17	-	0.09	4	9	9	7	7	sw.	U. S. Reclamation Service.
Metolius.	Clackamas	3,525	3	39.0	-	74	7	10	21	49	0.25	-	0.18	2	24	4	3	3	w.	John A. Hoffman.
Miramonte Farm.	do.	195	25	43.6	-2.1	67	7 ^b	23	25	36	5.13	+0.63	1.33	1.0	20	6	6	19	n.	G. Muecke.
Mount Angel.	Marion	485	27	44.6	-3.5	63	6 ^b	29	21	36	5.18	-	2.20	10.0	21	7	8	6	w.	Dr. Urban Fisher.
Mount Hood.	Hood River	1,450	1	37.6	-	61	9	10	25	36	5.18	-	2.20	8.0	21	8	6	20	sw.	Isaac Beal.
Musick.	Douglas	5,000	4	33.4	-	61	9	11	20 ^b	31	15.10	-	2.21	132.0	21	8	3	20	nw.	Alex. Lundberg.
Newport.	Lincoln	69	26	43.5	-2.7	63	6	27	25	33	8.24	+0.54	3.17	0	20	4	6	21	w.	Wm. Mathews.
Odell.	Hood River	1,000	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	sw.	W. H. Chipping.
Ortley.	Wasco	1,600	2	37.6	-	57	9	20	21</											

TABLE 1.—*Climatological data for March, 1913. District No. 12—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Oregon—Continued.</i>																				
Van.	Harney	3,506	2	32.5*	.....	59d	10	6*	26	39	0.35	.....	0.20	3.5	2	6d	10d	nw.	George Howe.
Vida.	Lane	1,100	2	41.2	.....	69	7	22	25	33	11.04	.....	2.33	6.0	22	8	23	w.	W. H. Pendell.
Waldo.	Josephine	1,900	1	42.9d	.....	68d	7†	23d	14	35	4.28	.....	1.35	3.5	6	8	16	w.	M. M. Lewis.
Wallace Orchard.	Polk	170	4	44.2	.....	66	7	21	25	32	3.79	.....	1.10	0.5	14	4	11	.....	Charles A. Park.
Wallowa.	Wallowa	2,035	10	31.9	— 5.9	57	14	— 1	20	43	3.47	+ 2.05	0.58	8.4	16	5	2	nw.	L. J. Coverstone.	
Wamie.	Wasco	1,500	12	41.0*	.....	65*	8*	13*	22	39	0.72	.....	0.20	5.0	7	0	19	w.	A. J. Swift.
Warmspring.	Crook	1,500	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	George W. Robbins.
Wasco.	Sherman	1,263	....	41.6	.....	59	4	15	25	28	0.77	.....	0.25	3.0	11	14	10	w.	J. R. Howell.
Weston.	Umatilla	1,800	21	38.0	— 3.3	57	4	8	19	31	3.32	+ 0.54	0.62	10.6	10	3	6	se.	M. A. Baker.	
Williams.	Josephine	1,368	21	44.2	— 1.2	75	7	18	15	49	0.91	— 3.17	0.20	T.	9	12	4	15	n.	Francis J. LeRoy.
Yonna.	Klamath	4,146	6	28.9	.....	54	9	1	1	39	0.82	.....	0.20	3.8	8	0	12	w.	Ward Rueck.

*, †, ‡, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow

TABLE 2.—*Daily precipitation for March, 1913. District No. 12, Columbia Valley.*

TABLE 2.—Daily precipitation for March, 1913. District No. 12—Continued.

Stations.	Watershed.	Day of month.																													Total.			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>Idaho—Continued.</i>																																		
Murtaugh	Snake	.12	.10	T.	.11	T.																												0.27
New Meadows	Salmon	.45																																3.21
Nezperce	Clearwater																																2.60	
Oakley	Snake																																0.25	
O'Hara Bar	Clearwater																																	
Orofino	do	.02	.42	.25	.06																													
Payette	Payette	.04	T.	T.	T.																												0.86	
Pierson	Salmon																																1.78	
Pine	Boise		T.																														2.95	
Pleasant Valley	do	.03	.04	T.	.17	.03																										1.30		
Pocatello	Port Neuf	.03																															1.28	
Pocatello Nursery	do																																	
Poplar	Snake	.12	.25		.14																												1.06	
Porthill	Kootenai																																1.58	
Powers Ranch	Boise	.15		.03																													4.59	
Priest River Exp.	Pend Oreille	T.																															2.19	
Station No. 1																																		
Priest River Exp.	do		T.																														2.09	
Station No. 2			T.																														2.17	
Priest River Exp.	do																																	
Station No. 3																																		
Pyle Creek	Payette	T.	.14	.17	.05																											5.36		
Rattlesnake Creek	Bolse	.04																															3.25	
Richfield	Big Wood																																0.41	
Roseberry	Payette																																	
Roseworth	Snake																																0.59	
Rupert	do		T.	.03																													0.33	
St. Anthony	do																																	
St. Maries	St. Joe																																	
St. Michael's Priory	Clearwater	T.	.08	.36	.04																											4.11		
Salmon	Salmon	T.	.04	.04	.01																											0.96		
Sandpoint	do	.05																															1.95	
Sheep Hill	Boise	.09	.17	.02	.01																											4.36		
Shoshone	Big Wood		T.		T.	T.																										0.28		
Silver City	Owyhee	.03	.05																														3.32	
Smith Prairie	Boise																																1.26	
Soldier Creek	Big Wood		T.		T.	T.																										2.38		
Spirit Lake	Pend Oreille	.04																															0.30	
Springfield	Snake																																	
Spring Hill	Boise	.15																															2.32	
Sugar	Snake																																0.61	
Sunnyside	do																																0.72	
Tripod Mountain	Payette	.03	.19	.21	T.																											4.92		
Twin Falls	Snake	.05	T.	T.	T.																											0.65		
Vernon	do																															0.73		
Wallace	C. d'Alene	T.	.11	.40	.12	.08																									5.32			
Weiser	Weiser	.04																														0.01		
Wendell	Big Wood	T.		.05	T.																											0.29		
<i>Washington</i>																																		
Aberdeen	Coast	.95	.31	.10																													6.19	
Anacortes	Puget Sound	*	*	.55																														
Anatone	Snake																																3.83	
Baker	Puget Sound	.20	.10	T.																												4.10		
Bellingham	do	.23	.54	.02	.03																											1.94		
Bellingham (near)	do																																	
Blaine	do	.30	.04	.04	.06																											4.00		
Blewett	Wenatchee	.10																														1.42		
Bremerton	Puget Sound		.16	.03	.04																											1.72		
Brewster	Columbia																															0.01		
Buckley	Puget Sound	.15	.33	.04	.17																											3.59		
Bumping Lake	Puget Sound																																	
Cedar River	Puget Sound	.13	.29																														2.83	
Centralia	Coast																																2.57	
Clearbrook	Puget Sound	.58																																

TABLE 2.—*Daily precipitation for March, 1913. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																														Total		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
<i>Washington—Con.</i>																																		
Lacrosse.	Palouse.	.04	.10	.02																														1.48
Lake Cleatum.	Yakima.	T.	.13	T.	T.	T.																											3.09	
Lake Kachess.	do.	.20	.03	.02																													3.71	
Lake Keechelus.	do.	.14	.18	.04	.05																												4.46	
Lakeside.	Columbia.																																0.11	
Laurel.	do.	.21	.08	.01																													3.31	
Laurier.	Kettle.	.02	.01	.04																													0.81	
Lone Tree.	Coast.	.52	1.02	.22	.05	T.																											5.40	
Longmires Springs.	Puget Sound																																	
Lost Creek.	Columbia.																																	
McComihe.	do.	T.																																
McCubbers Ranch.	do.	.05	.02																															
Moses Lake.	do.	T.	T.	T.																													0.75	
Mottinger.	do.	.13	.16	.05																													1.60	
Mount Pleasant.	Coast.																																	
Moxee.	Yakima.	T.	T.	T.																														
Newport.	Pend Oreille.	T.	.05	.07																													1.66	
North Head.	Coast.	.05	.42	.23	.08	.02																											3.35	
North Sundale.	Columbia.	.10																															0.42	
Northport.	do.	.09	T.																														0.92	
North Yakima.	Yakima.																																	
Odessa.	Columbia.	.03																															0.42	
Olga.	Puget Sound	.20																															1.69	
Olympia.	do.	.34	.16	.08	.03																												3.20	
Omsk.	Okanogan.																																0.31	
Oroville.	do.																																T.	
Peola.	Snake.	.01	.34																														3.62	
Pomeroy.	do.	.30	.02																														2.92	
Port Crescent.	Coast.	.13	T.	.04	.02																												1.46	
Port Townsend.	Puget Sound																																1.03	
Pullman.	Palouse.																																3.76	
Queets River.	Coast.	T.	.07	.10	.06	.35	T.	T.	T.	T.	.12	T.	.09	.10	.06	T.	.91	.21	.15	.09	.02	T.	T.	.19	T.	T.	T.	T.	T.	T.	T.	13.40		
Quinault.	do.	.61	.20	.65	.24																												10.34	
Reardan.	Spokane.																																0.16	
Republic.	Kettle.	.03																															1.35	
Rex Creek.	Columbia.																																0.38	
Ritzville.	do.	.02																																
Robertsville.	do.																																	
Rock Lake.	Palouse.																																	
Rosalia.	do.	T.	.07	.13	.10																											1.42		
Russells Ranch.	Yakima.	.06	.03	.02	.03																											1.43		
Seattle.	Puget Sound	.05	.04	.06																													1.55	
Sedro Woolley.	do.	.17	.03	.09																													2.62	
Sixprong.	Columbia.	.01	.01																														0.06	
Skagit Power Dam.	Puget Sound	.10	.39	.36	.05	.10																										8.76		
Snohomish.	do.																																3.52	
Snoqualmie Falls.	Yakima.	T.	.14	.20	.04	.14																												
Snoqualmie Pass.	Columbia.																																	
Suyders Ranch.	do.																																	
South Bend.	Coast.	.62	.31	.13	.12																												5.95	
Spokane.	do.	.02	.10	.04	T.																											0.59		
State University.	Puget Sound	.05	T.	.05	.06																											1.39		
Stokes Ranch.	Columbia.																																0.43	
Summer.	Puget Sound	.09	.25	.05	.13																											0.09		
Tacoma.	Puget Sound	.05	.21	.18	.18																											2.20		
Tatoosh Island.	Coast.	.15	.76	.10	.21	.07																										4.30		
Tieton.	Yakima.	T.	T.																													0.79		
Touchet.	Columbia.	.03	.30	.03	.05																											6.38		
Touchet Ridge.	do.	.06	.60	.17	.07																											0.00		
Trinidad.	do.																																3.30	
Vancouver.	do.	.21	.03	.09																													2.99	
Vashon Island.	Puget Sound	T.	.12	.04	.06	.08	.01	T.	T.	.10	T.	.03	T.	.13	.39	.57	.09	.02	T.	.01	T.	.02	T.	T.	.41	.12	.38	.						

TABLE 2.—*Daily precipitation for March, 1913. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for March, 1913. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																													Total.														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31													
Oregon—Continued.																																													
Prineville	Deschutes										T.	.22	.47				T.	.14	.10	.36	.03	.13	.03	.06	.11	.10		.05	.75	.22	.16		2.96												
Prospect	Rogue	.03										.08	.07				T.	.37	.14	.05	.05	.34	T.	.11		T.	.06	.05	T.				1.34												
Rager Creek	Deschutes	.32										.05	.01				.02	.04	.01	.05	.07	.04	T.	.03		T.							0.90												
Ramsey	Columbia	.04																.25	.60	.30		.30	.40			T.		.10	.20	.40	.50	3.50													
Range	John Day	T.	.20									.10	T.	.15			T.	.16	T.	.34	T.	T.	T.	.10	T.	T.	T.	T.				1.54													
Ray Creek	Columbia	.20	.15	T.	.12							.05	.05				T.																	0.92											
Redmond	Deschutes	.04																.02			.08													0.22											
Reston	Umpqua	T.	.20									.05	.20	.47					.15	.02	.40	.80	.07	.20	.17	.10	T.	.20	.70	.37	.12	.06	4.28												
Richland	Snake																T.																												
Riddle	Umpqua		T.									.01	.01	.18	.49				.03	.01	.09	.05	.55		.01	.06	.02		.01	.08	.10	.01		1.71											
Rio Hermoso	Deschutes																																												
Riverdale	do	T.	T.	.08	.02						T.							T.	T.	T.	T.	T.	.22	T.	.01	.08		.02	T.	T.	T.	T.	0.40												
Riverside	Malheur	.05																.10	.12		.50	.20											1.32												
Rock Creek	Willamette	T.	.63	.06	T.	.03						.07	T.	.58	.44	T.	.07		.30	.24	.38	T.	.39	.34	.19	.23		.64	.56	.24	.45	1.40	.58	9.58											
Roseburg	Umpqua	.06	.08	.10													T.	.19	.23		.31	.02	.10	.13	.13	.01	.11	.05		.08	.41	.17	.04	.01	2.23										
Rosland	Deschutes	.12		.08													T.	.13	.06		T.	.11	.10	.12		.41	T.	T.							1.90										
Salem	Willamette	.19	T.		.01												T.	.08	.14	.03		.12	.20	.07	.06		.16	.21	.02	.04		.05	.22	.87	.61	.28	3.36								
Seneca	SE. drainage	.03																.02		.06	.06			.20										1.04											
Silver Lake	do																																		0.10										
Siskiyou	Rogue																	.06	.07	.38		.09		.47	.10	.39	.18	.14	.10	.27	.24	.04			2.44										
Sisters	Deschutes	.07																	.09		.36														1.18										
Sparta	Snake	.20	.05	T.	.03							.20							.50	.30			.30	T.										1.81											
Stafford	Willamette	.16	.02									.10	.01	.10	.24	.03			.06	.30	.09	.15	.03	.02	.21	.08	.04		.19	.91	.19	.70	.13	4.96											
Starkey	Gnd. Ronde	.03	.12	.13	.26													.18	.02	.19	.08		.10	.16	.15	.38									2.78										
Summit	Willamette	.33		.08	.04	.03												.14	T.	.38	.38	T.	.13	.35	.34	.39		.09	.08	.36	.24		.13	.86	.24	1.17	.28	8.62							
Summit Prairie	Deschutes																																												
Susanville	John Day	T.	.15		.04													.06	.10	.05		.10	.10	.30	.25	T.	T.	.01	.20	.14	.20		.18	.35	.03		2.26								
Talent	Rogue																	T.	.05																	0.48									
Tamarack	John Day	.09	.03		.10													.05	.01	.01															1.51										
Telocaset	Snake	.10	T.	.20														.30																	3.39										
The Dalles	Columbia	.03	.02		.03																																								
Tillamook	Coast																																												
Toledo	do	.40																.70	.30		.20	.30	L.	.10	.40	.40	.30	1.00	.30	.70				2.00	2.20	1.90		12.20							
Trail Rogue	Rogue	.07																	.14	.27																	1.66								
Umatilla	Columbia	T.	.05	.10	.04														.25	.01	.04	.02	.08	.18	.05	.07	.06										0.35								
Union	Gnd. Ronde	.19	.15	.45															.04																		0.35								
Vale	Malheur	.12	.04																.02	.03																	0.48								
Valley Falls	SE. drainage																	.08																			0.20								
Van	Malheur																	T.		T.	T.																0.35								
Vida	Willamette	.15	.47	.12														.15	.35	.32	.05		.08	.46	.68	.52	.03	.40	.30	.27	.20	T.													
Vistillas	Pitt	.08																																					0.80						
Waldo	Rogue	1.30																	T.		T.	T.																4.28							
Wallace Orchard	Willamette																																												
Walloupa	Gnd. Ronde	T.	.15	.11	.12														.14	.17	.01																								
Wallowa	do	T.	.30	.13	.40	.02												T.		.12	.06																								
Wamic	Deschutes																		.07																										
Warmspring	do																																												
Wasco	Columbia	.03	.04																	.10																				0.77					
Welches	do	.51																	1.50	.45																									
Weston	Walla Walla	.62	.41	T.														T.	.01																										
Williams	Rogue																		T.	.13																									
Yonna	Int. drainage	.15	T.																.08	.20	T.	.10	.08	.08	.09																				

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

|| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures for March, 1913. District No. 12, Columbia Valley.

Date.	Montana.				Afton, Wyo.				Idaho.																					
	Kalispell.		Missoula.						Boise.		Bonners Ferry.		Hot Spring.		Lewiston.		Mackay.		New Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	28	13	36	24	39	14	45	23	34	12	50	18	47	27	31	16	26	-7	40	25	40	20	39	17	28	-4	42	24		
2....	38	24	42	26	32	9	44	31	40	25	53	30	47	36	40	11	30	10	42	24	37	19	39	14	32	9	40	31		
3....	42	29	47	31	42	21	52	31	41	31	61	30	47	38	42	13	36	12	40	32	40	26	48	29	37	26	42	34		
4....	41	29	50	32	42	32	55	36	50	32	62	35	53	37	46	23	46	31	49	35	50	30	48	31	37	30	43	32		
5....	40	29	42	31	47	24	51	35	45	34	60	37	48	38	40	24	44	31	47	32	45	27	47	30	38	22	38	32		
6....	41	31	44	32	42	24	51	30	43	33	60	27	57	36	36	20	43	30	44	30	45	30	36	13	44	32	44	32		
7....	45	30	49	29	37	5	55	32	49	23	59	20	60	32	37	14	42	11	47	24	43	19	32	23	38	8	52	24		
8....	49	23	56	25	35	3	55	30	54	28	61	21	60	32	36	14	43	10	51	26	45	17	48	24	40	14	53	25		
9....	49	24	54	24	38	1	57	34	50	24	62	27	59	32	38	17	46	17	54	28	47	18	50	27	40	13	52	21		
10....	42	22	42	23	37	0	62	33	35	26	64	27	54	32	33	16	36	14	51	32	47	17	53	27	40	15	42	24		
11....	44	27	48	32	56	23	48	35	45	21	68	38	52	32	39	16	40	16	49	35	43	30	42	30	45	27	43	30		
12....	36	18	43	29	46	26	43	28	36	26	57	23	46	34	34	18	45	25	42	21	45	23	37	28	39	30	41	24		
13....	28	14	32	16	40	16	39	27	36	14	46	24	42	27	47	13	36	6	31	18	37	21	34	10	36	14	34	14		
14....	31	9	32	2	22	-13	40	22	40	12	45	21	39	26	30	15	33	-2	32	15	38	15	38	16	23	0	35	11		
15....	40	19	40	15	35	-9	46	25	40	22	52	19	49	29	30	11	37	-1	39	17	42	20	43	16	32	-3	38	22		
16....	46	29	43	28	41	1	49	31	43	25	60	20	50	40	38	18	34	28	46	29	50	27	50	24	35	16	37	30		
17....	38	29	44	36	45	30	53	40	45	24	56	43	48	42	35	30	54	39	43	32	53	35	41	33	45	33	41	33		
18....	29	4	48	34	42	28	45	35	44	22	55	38	57	40	42	25	35	26	51	35	50	30	43	31	40	33	41	33		
19....	12	-1	14	11	38	25	41	26	30	7	50	32	40	26	41	19	26	14	40	26	39	32	35	27	22	16	32	22		
20....	15	-12	21	-2	32	4	30	20	24	-4	42	19	32	19	39	17	32	-6	25	11	29	9	30	13	31	0	27	2		
21....	24	-10	31	3	35	-6	38	23	32	0	40	23	41	20	36	14	30	-13	36	14	32	8	35	16	24	4	34	4		
22....	29	9	38	21	42	20	49	32	31	15	47	31	47	32	34	1	35	25	40	30	44	14	47	27	33	20	34	21		
23....	28	13	35	23	42	23	38	30	38	22	46	32	45	32	30	11	34	22	37	26	38	28	37	27	32	20	36	28		
24....	17	5	23	10	40	14	35	26	30	16	40	21	39	30	32	15	25	1	32	21	33	20	33	17	25	17	31	23		
25....	18	-5	24	5	37	3	31	22	30	-5	42	22	35	23	28	17	20	2	28	7	30	12	32	16	24	4	27	-3		
26....	29	-1	34	4	33	-10	40	18	34	11	43	16	43	22	26	4	25	-19	35	2	31	5	40	11	22	19	36	9		
27....	38	23	46	28	42	-3	51	33	35	28	52	33	55	35	42	22	35	22	43	26	45	22	49	26	33	16	45	28		
28....	43	32	50	36	40	20	50	40	42	28	60	40	51	42	45	20	42	31	46	34	56	34	51	30	37	29	38	32		
29....	44	29	49	34	41	31	52	42	45	32	59	39	56	42	45	18	46	32	54	38	55	30	49	32	38	33	44	33		
30....	45	32	50	34	51	34	58	44	45	32	64	45	55	42	53	25	40	35	55	43	55	37	56	38	45	35	42	34		
31....	49	31	46	32	69	38	64	40	43	22	72	35	53	41	60	30	38	32	66	43	60	34	65	30	54	35	45	33		
Mns..	35.4	17.7	40.5	22.8	40.6	13.5	47.0	30.8	39.6	20.6	54.4	28.6	48.6	32.8	38.9	16.8	35.6	14.8	43.5	26.5	43.0	22.5	44.6	24.5	35.0	16.5	39.5	23.9		

Date.	Washington.												Tatoosh Island.															
	Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	50	30	49	32	44	17	55	33	39	23	50	40	44	26	42	25	42	30	51	34	47	27	44	29	49	32	45	39
2....	48	40	46	40	45	31	51	34	43	30	46	43	51	31	41	30	46	37	54	39	57	35	40	33	55	39	45	39
3....	48	40	50	38	48	34	48	35	43	30	46	43	48	33	47	30	46	33	47	43	50	34	43	35	47	42	45	42
4....	52	42	50	36	45	33	53	33	41	31	50	45	52	34	33	41	36	54	43	53	37	43	34	52	42	48	43	
5....	55	45	56	40	49	32	57	40	46	34	50	44	52	32	43	34	49	34	53	44	57	33	41	34	54	43	47	43
6....	59	35	54	37	49	30	64	34	45	31	63	43	60	28	42	30	51	38	57	33	46	31	49	36	53	40	52	40
7....	62	38	54	30	53	21	62	32	37	31	55	44	60	28	52	32	53	37	54	33	50	27	56	37	52	43	50	40
8....	60	35	52	32	55	32	69	31	44	28	46	40	66	30	55	30	49	29	53	40	62	37	53	27	52	41	46	40
9....	65	31	52	30	54	31	65	29	53	29	52	40	64	30	56	28	52	29	55</									

TABLE 3.—*Maximum and minimum temperatures for March, 1913. District No. 12—Continued.*

Date.	Walla Walla, Wash.	Oregon.																			
		Ashland.		Baker.		Eugene.		Gold Beach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.	
		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	50	34	49	30	33	15	54	28	54	39	54	20	54	33	50	33	48	32	.....	47	21
2.....	55	35	55	41	36	27	60	34	52	45	55	33	52	44	55	43	57	44	.....	38	28
3.....	50	44	58	40	39	31	62	36	54	44	54	40	54	44	54	47	61	46	.....	46	32
4.....	48	41	55	36	48	33	58	30	58	42	59	34	61	44	60	46	64	43	.....	57	34
5.....	54	38	60	38	44	32	56	28	56	42	58	36	58	46	57	46	62	41	.....	56	31
6.....	56	39	70	35	46	26	61	30	50	38	60	29	74	34	65	40	63	38	.....	58	28
7.....	53	34	69	38	50	26	64	32	59	42	62	26	67	37	67	45	69	37	.....	56	24
8.....	59	43	68	38	51	27	65	34	58	42	63	27	58	43	58	44	64	36	.....	59	25
9.....	60	40	67	37	52	26	64	30	58	41	64	27	62	36	65	40	59	36	.....	61	25
10.....	53	40	57	38	47	29	62	32	54	42	59	25	53	40	50	39	49	39	.....	60	25
11.....	53	34	50	33	43	30	60	31	50	34	60	30	52	30	47	38	53	38	.....	54	38
12.....	43	34	44	31	36	20	65	34	48	40	50	35	49	37	44	35	45	35	.....	50	25
13.....	45	32	40	31	33	19	69	36	47	36	52	35	50	35	49	38	46	33	.....	45	24
14.....	48	34	50	38	36	21	60	30	49	33	53	35	54	32	48	36	50	33	.....	49	21
15.....	49	32	49	25	41	19	62	29	51	34	56	21	60	28	54	32	61	29	.....	48	11
16.....	54	44	60	36	39	30	58	31	56	38	59	38	60	40	55	45	65	43	.....	49	30
17.....	53	45	55	41	46	33	60	28	56	42	58	37	59	44	51	43	50	43	.....	48	26
18.....	54	37	55	35	44	32	58	29	53	43	62	41	49	44	48	40	54	41	.....	51	37
19.....	39	26	43	29	32	14	62	33	46	38	58	28	46	37	41	32	41	35	.....	50	34
20.....	32	17	41	28	24	6	64	30	56	34	40	21	44	34	39	30	43	32	.....	36	27
21.....	41	17	48	34	29	12	58	24	48	40	44	19	46	37	40	30	49	33	47	27	42
22.....	41	30	42	32	38	24	57	26	48	37	58	29	47	38	40	32	46	39	47	26	41
23.....	42	32	47	28	34	22	58	27	47	33	57	31	45	32	45	35	44	32	47	29	44
24.....	39	28	41	25	31	20	60	26	46	32	44	29	45	30	44	33	43	31	49	31	40
25.....	34	21	44	28	26	15	48	18	47	31	50	17	48	29	44	29	47	26	47	30	37
26.....	47	27	46	28	36	12	56	24	50	34	44	25	52	29	48	33	50	31	53	25	42
27.....	56	38	49	33	45	24	63	34	49	38	59	32	52	38	50	38	51	38	56	35	57
28.....	54	42	54	39	50	37	65	33	50	47	60	42	52	45	57	36	55	45	60	39	60
29.....	56	43	62	44	53	38	69	36	51	48	58	47	52	50	52	47	56	50	60	45	63
30.....	49	44	60	43	46	34	68	42	54	48	60	42	53	48	47	41	62	47	51	41	60
31.....	56	43	60	44	50	36	65	38	53	47	63	43	55	44	53	40	56	45	63	38	70
Mns.....	49.1	35.1	53.4	34.7	40.6	24.9	61.0	30.7	51.9	39.5	55.9	31.4	53.6	38.1	50.9	38.3	53.6	37.6	.....	50.9	27.7

*, b, *, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.